

Silicones

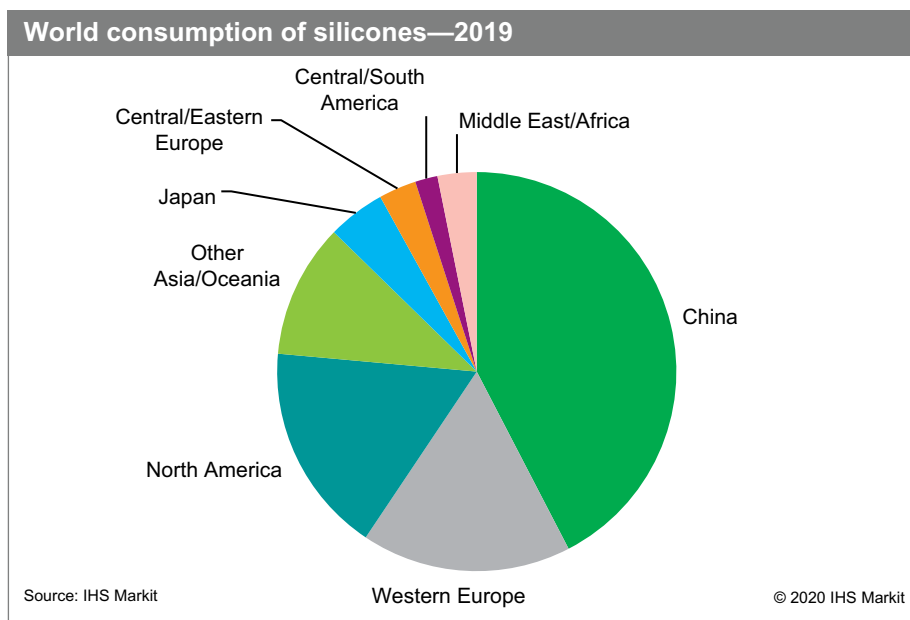
31 March 2020

Abstract

China continues to be the largest consumer of silicones in the world. In 2002, China accounted for only 7% of global consumption compared with the United States at 30% and Western Europe at 34%. In 2019, China's share of the global market had increased to 42% from 36% in 2012, while the shares of the United States and Western Europe had declined to 15% (down from 17% in 2012) and 17% (down from 23% in 2012), respectively.

Silicones possess physical and chemical properties that allow their use in a multitude of applications. Silicones or polysiloxanes are versatile polymers consisting of an alternating silicon-oxygen backbone, typically with aliphatic or aromatic side groups. Silicones can be classified as fluids, elastomers, or resins depending on their molecular weight, the extent of cross-linking, and the type and number of organic groups attached to the silicon atoms.

The following pie chart shows world consumption of silicones:



The overall global silicones annual growth rate is expected to be slightly over 4% during 2019–24. This growth is slower than in previous years because of slowing GDP growth globally, although silicones growth will continue to outpace GDP. Furthermore, in 2020, the COVID-19 outbreak has had an impact on the global silicones market.

Even as future consumption growth is expected to slow somewhat, China's silicones demand is still expected to grow strongly in the next few years. Although the short-term impact of COVID-19 will be significant, silicones use in China is expected to recover and grow as the outbreak subsides. Strong growth is also expected to continue in Southeast Asia and

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India, with moderate growth in the Middle East and Africa, although consumption levels in these latter regions are still fairly low. Consumption in North America, Central and South America, Central and Eastern Europe, and other Northeast Asian markets (excluding China and Japan) are each expected to increase modestly, while Western Europe and Japan will each experience more limited growth.

During 2019–24, global demand growth for silicone fluids, elastomers, and resins, are each expected to average about or slightly over 4% annually. For silicone fluids, cosmetics, toiletries, and medicinal/pharmaceutical preparations will be the main uses. Silicone elastomer consumption will be driven by demand from the construction and automotive industries. Silicone resins growth is also dependent primarily on the construction industry.

For more detailed information, see the table of contents, shown below.

IHS Markit's Chemical Economics Handbook – *Silicones* is the comprehensive and trusted guide for anyone seeking information on this industry. This latest report details global and regional information, including



Global summary;
regional coverage



Producers with
annual capacities
and plant sites



Production figures
and trends



Consumption and
forecasts by end use
application



Manufacturing
processes and
environmental issues



Trade – imports
and exports

Key Benefits

IHS Markit's Chemical Economics Handbook – *Silicones* has been compiled using primary interviews with key suppliers, organizations and leading representatives from the industry in combination with IHS Markit's unparalleled access to upstream and downstream market intelligence, expert insights into industry dynamics, trade and economics.

This report can help you:

- Identify trends and driving forces influencing chemical markets
- Forecast and plan for future demand
- Understand the impact of competing materials
- Identify and evaluate potential customers and competitors
- Evaluate producers
- Track changing prices and trade movements
- Analyze the impact of feedstocks, regulations, and other factors on chemical profitability

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